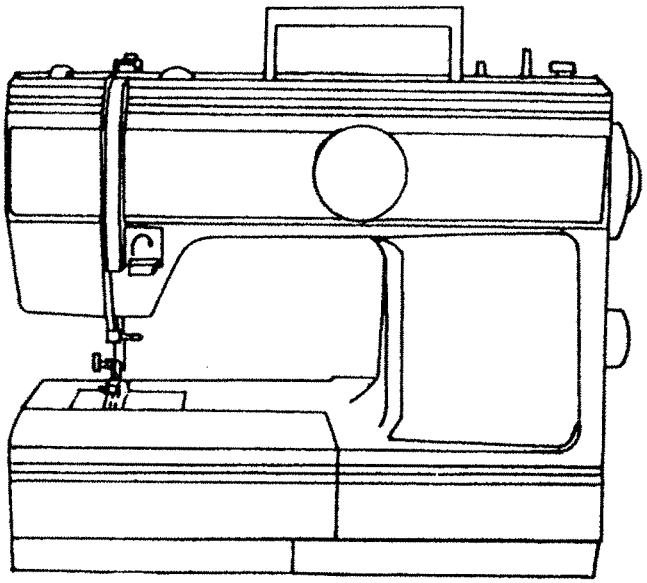
INSTRUCTION MANUAL FOR SEWING MACHINE



212 - 312

WHITE

Call Toll Free
800-331-3164
www.whitesewing.com

POLARIZED PLUGS CAUTION

This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of the polarized plug.

WHITE SEWING MACHINE COMPANY

Record in space provided below the Serial No. and Model No. of this appliance.

The Serial No. is located on Bed Plate.
The Model No. is located on Rating Plate.

Serial No. _____.

Model No. _____.

Retain these numbers for future reference.

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the following:

Read all instructions before using (this sewing machine)

DANGER To reduce the risk of electric shock:

An appliance should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning. Always unplug before relamping. Replace bulb with same type rated 15 watts.

WARNING To reduce the risk of burns, fire, electric shock, or injury to persons:

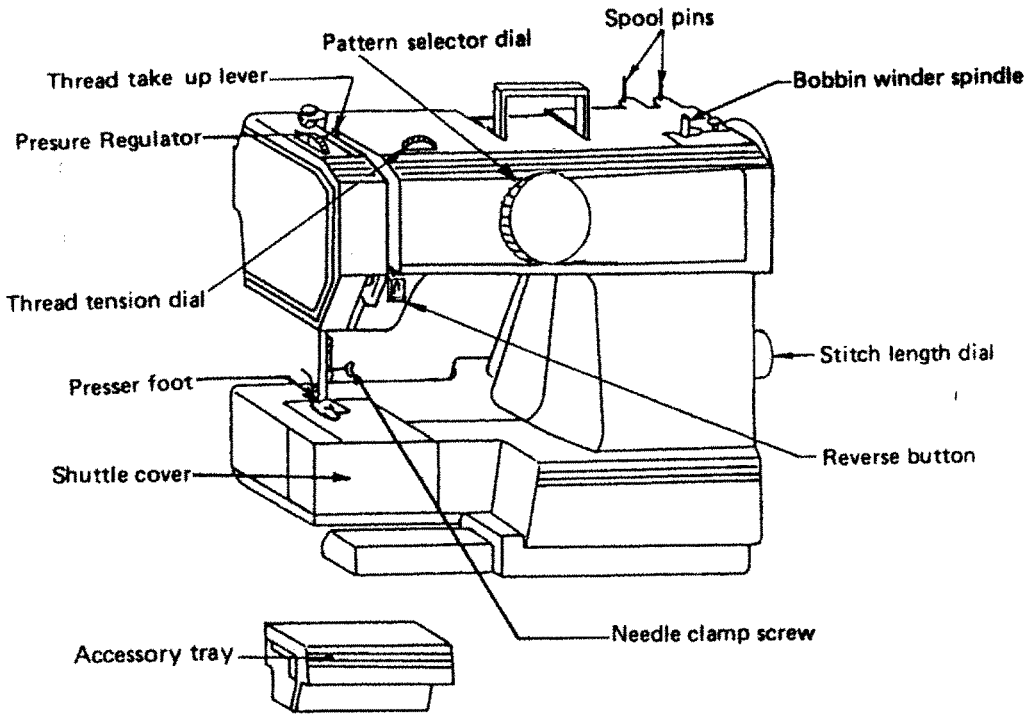
1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from the accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn all controls to the off ("0") position, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
11. Always use the proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break
14. Unplug the sewing machine when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
15. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

CONTENTS

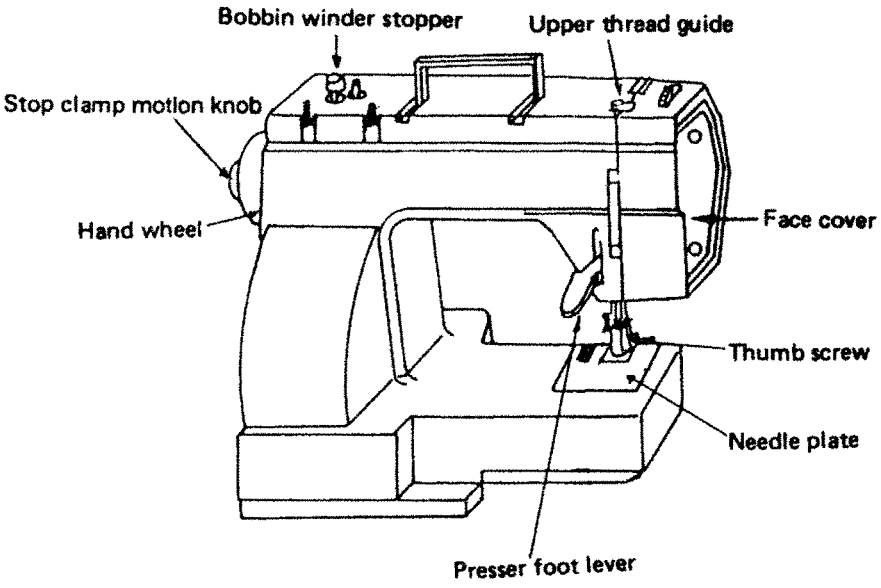
Names of Parts..... 1 & 2
Accessories..... 3
Before sewing (Power supply and Sewing Lamp)..... 4
Take out extension table, free arm sewing..... 5
Winding the bobbin..... 6
Removing bobbin case and bobbin..... 7
Inserting bobbin into bobbin case..... 7
Inserting bobbin case into shuttle race..... 8
Threading upper thread & Twin needle threading..... 9
Drawing up bobbin thread..... 10
Changing sewing directions..... 10
Levelling machine..... 11
Adjusting thread tension..... 12
Regulating the presser foot pressure..... 13
Drop feed..... 13
Changing needle..... 14
Fabric. Thread. Needle table..... 15
To start sewing..... 16
To finish seam..... 17
Straight stitch..... 18
Zigzag sewing..... 18
Button sewing..... 19
Zipper sewing..... 20
Hemming..... 21
Twin Needle..... 22
Embroidery..... 22
Quilter & Seam guide..... 23
Buttonhole sewing..... 24
Maintenance (Cleaning and oiling)..... 25
Checking Performance Problems WHAT TO DO..... 26

NAME OF PARTS (FRONT VIEW)



* 1. Use a soft cloth to clean the machine.
2. Do not expose the machine to direct sunlight.

(REAR VIEW)

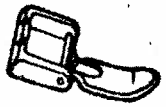

Bobbin winder stopper
Upper thread guide
Stop clamp motion knob
Hand wheel
Face cover
Thumb screw
Needle plate
Presser foot lever

ACCESSORIES

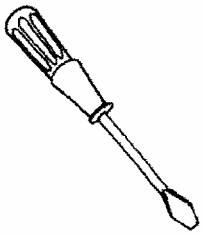
Bobbin

Spool pin felt

Zigzag foot
(On machine)

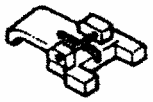


Zipper foot

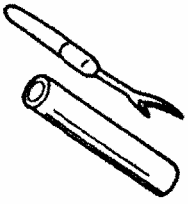


Screw driver

Machine oil



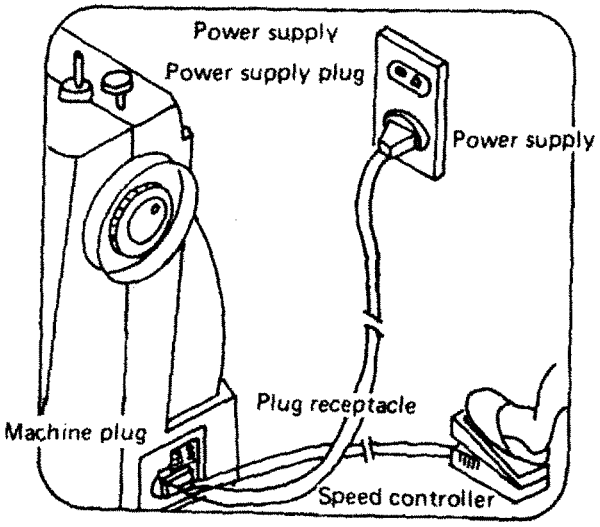
Button sew on foot



Buttonhole cutter

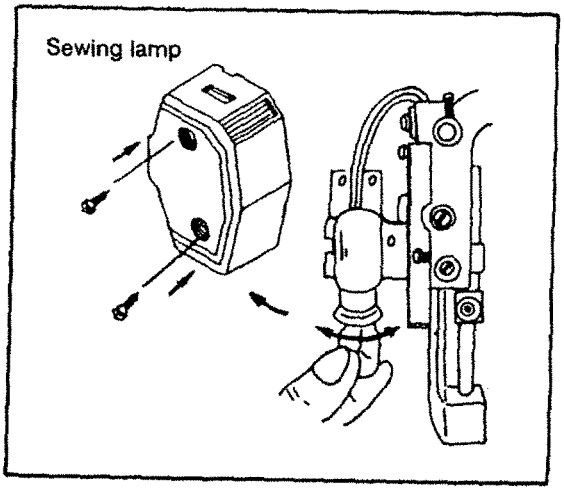
Needles
#11 #14

BEFORE SEWING



1. Fit plug into the machine.
2. Plug the machine to the power supply.
3. Sewing speed can be varied by the foot control.

Use only VGK model EZ-168A foot controller with sewing machine.



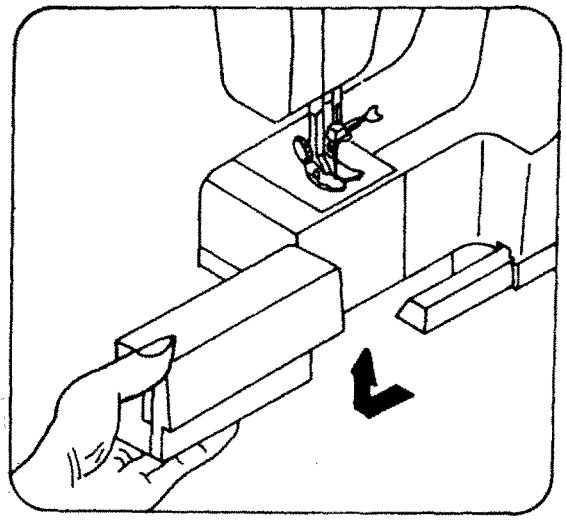
REMOVE OR INSTALL BULB

1. Open face cover in direction of arrow.
2. Remove bulb by unscrewing it counter-clockwise.
3. Install a new bulb by screwing it in clockwise.
4. Use a screw type bulb with 120V/15W(Max).

IMPORTANT : When leaving the sewing machine unattended, the plug must be removed from the socket outlet.

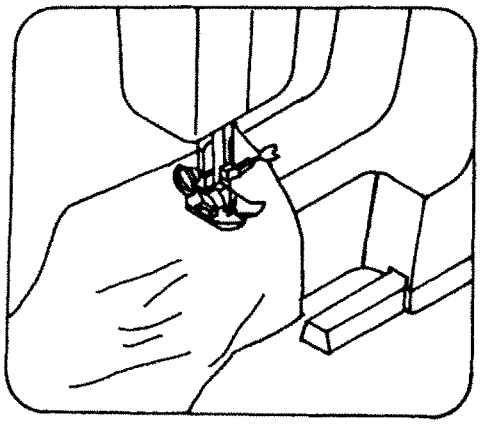
When servicing the sewing machine, or when removing covers or changing lamps, the machine must be disconnected from the supply by removing the plug from the socket outlet.

REMOVING EXTENSION TABLE



1.Hold the left end of table and pull out in direction or arrow.

FREE-ARM SEWING

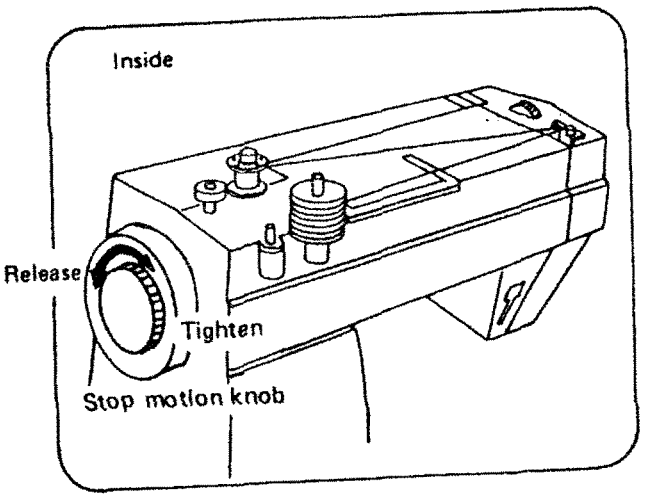


1. This sewing machine can be used as a flat bed machine but easily converts to free arm machine by removing the extension table.

2. Especially useful for sewing sleeves, pant legs, tubular fabrics etc., more easily.

3. To sew tubular just slip the sleeve or leg of pants on to the free arm as shown at side.

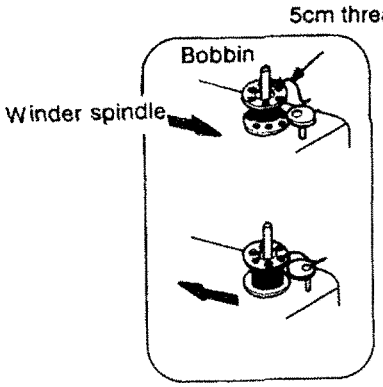
WINDING THE BOBBIN



1.Release stop motion knob.

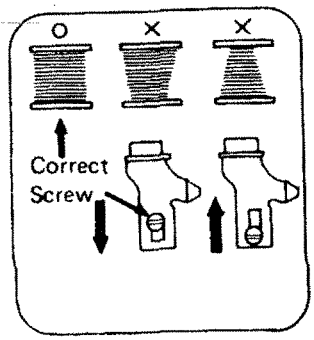
2.Thread as shown.

3. When the bobbin is full, the stop motion knob must be tightened.



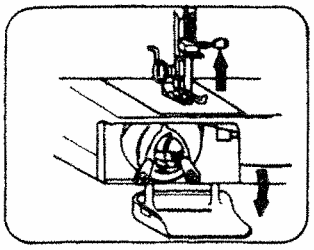
Push bobbin winder spindle in direction of arrow.

When bobbin winding is completed return spindle to original position.

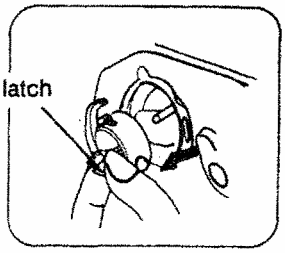


When bobbin winding is incorrect, release the screw of upper thread guide and adjust up or down until bobbin winding is balanced.

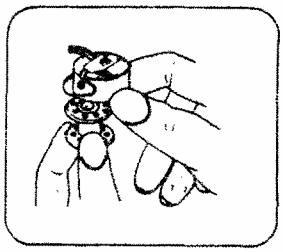
REMOVING BOBBIN CASE AND BOBBIN



1.Raise needle to its highest position and open the shuttle race cover.

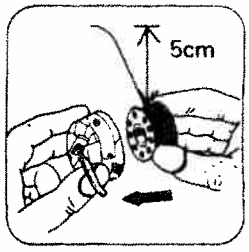


2.Open hinged latch of bobbin case and pull bobbin case out of machine.

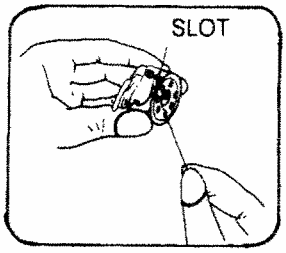


3.Release the latch and bobbin will fall out easily.

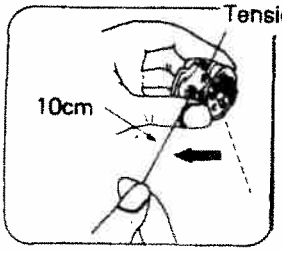
INSERTING BOBBIN INTO BOBBIN CASE



1.Pull off 5cm of thread from bobbin and insert it into bobbin case as shown.

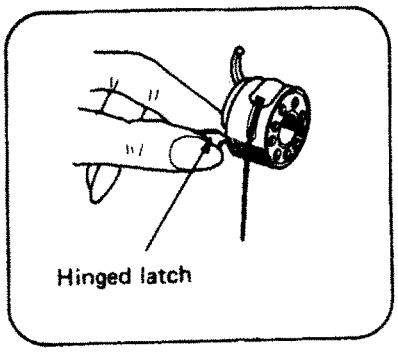


2.Guide the end of thread into slot.

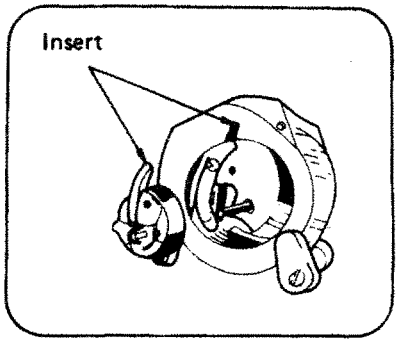


3.Pull into slot and under tension spring and draw out about 10cm of thread.

INSERTING BOBBIN CASE INTO SHUTTLE RACE

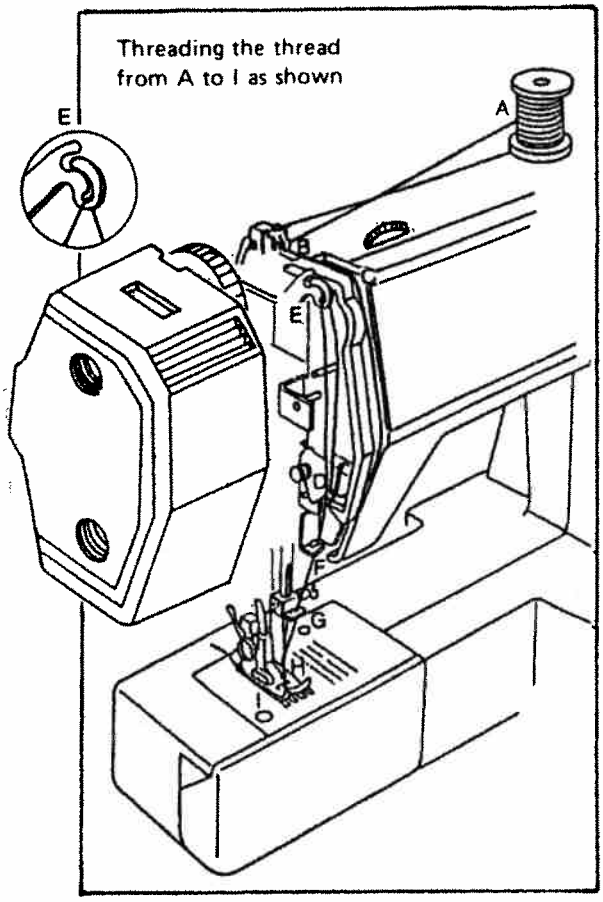


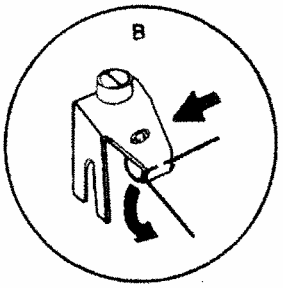
1.Raise needle to its highest position, pulling thread to the front, open the latch of bobbin case and hold it.

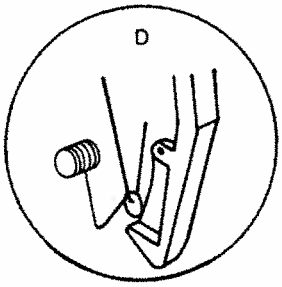


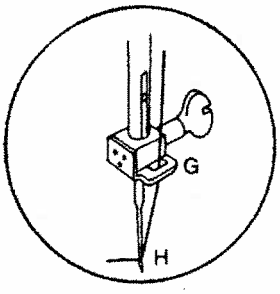
2.Holding latch open, place bobbin case onto centre pin in shuttle and release latch

THREADING UPPER THREAD

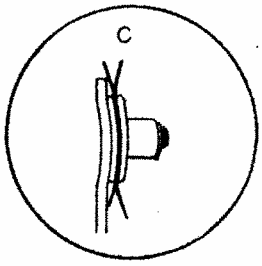




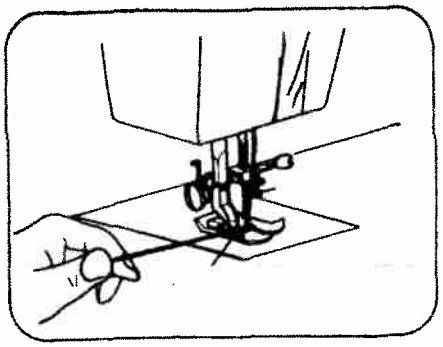




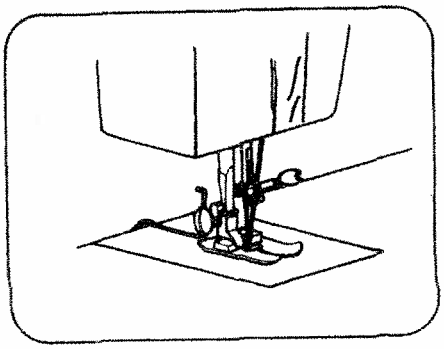
Twin needle threading



DRAWING UP BOBBIN THREAD



1. Hold upper thread with left hand, turn the hand wheel slowly towards you until the needle goes down and comes up. Then stop the hand wheel when the takeup lever is at its highest position. Lightly draw up the upper thread and the lower thread will be brought up in a loop.

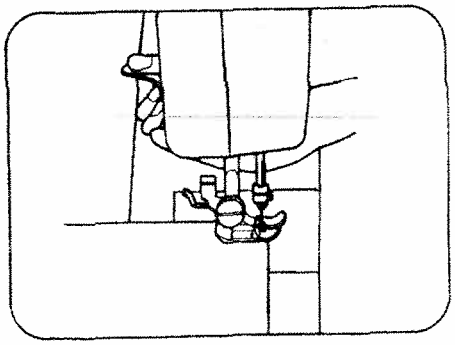


2. Pull out both threads and place them together under presser foot to the rear of machine.

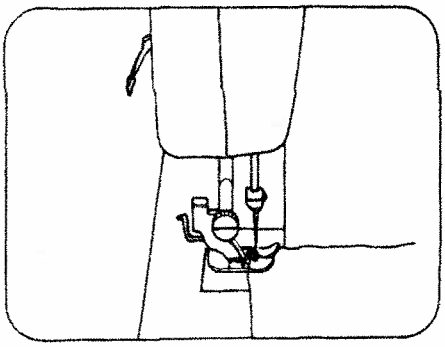
3. Place fabric under presser foot from the front, lower presser foot.

4. Start to sew
(see page 16)

CHANGING SEWING DIRECTIONS

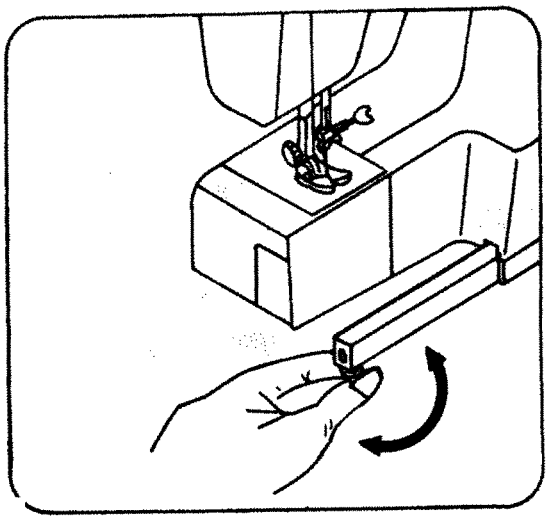


1. Lower needle down into fabric and raise presser foot, pivot the fabric around the needle to change direction as desired.



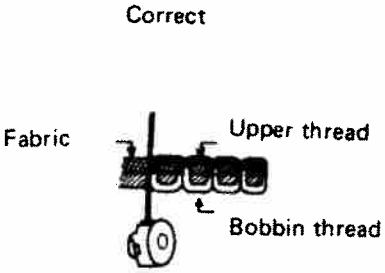
2. Lower presser foot and start to sew.

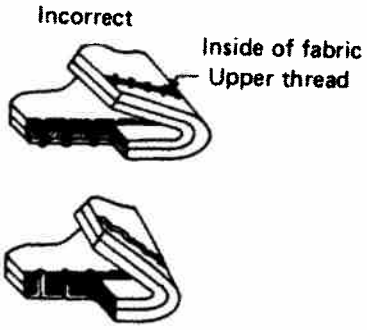
LEVELLING MACHINE



ADJUSTING THREAD TENSION

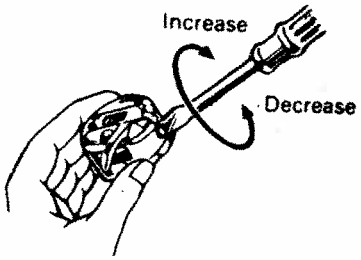
It is only normally necessary to adjust the upper thread tension to achieve the correct balance between the upper and lower threads.
The higher the number on the dial the greater the tension.



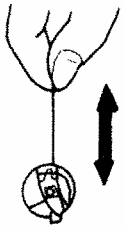


ADJUSTING LOWER THREAD TENSION

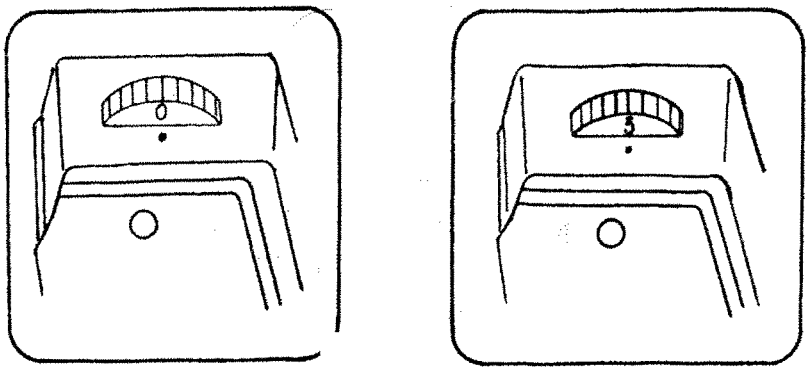
Lower thread tension can be adjusted by turning the screw on the bobbin case slightly to the right (clock-wise) to increase tension, (Anti-clockwise) to the left to decrease tension.



As a general guide only, the user can achieve the correct tension for normal sewing, by carefully suspending the wound bobbin in its case by the thread. If the bobbin and case immediately fall to the ground, the tension is too loose and should be increased. The correct tension is obtained when a slight jerk of the thread causes the bobbin to drop a short distance only. If this action does not move the bobbin the tension is too tight and should be loosened until the desired effect is achieved.

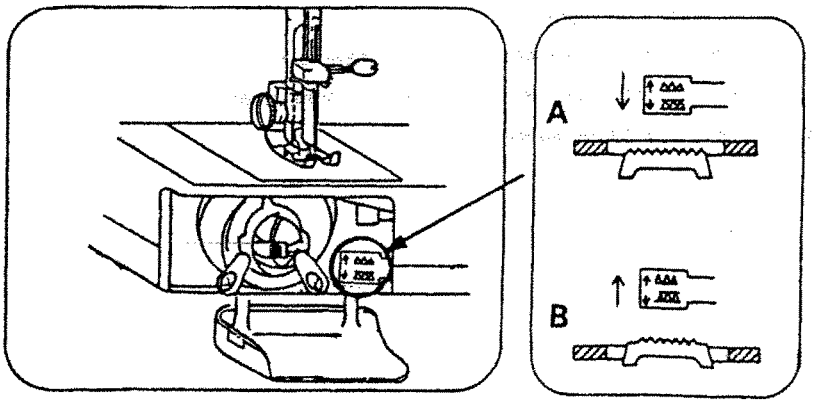


REGULATING THE PRESSER FOOT PRESSURE



1. Push down lever for desired pressure, for light fabrics set lever at 1, set at 2 for medium fabrics and 3 for heavy fabrics.
2. Insufficient pressure may cause poor feeding, skipped stitches, or difficulty in guiding the fabric.
3. When darning or sewing freehand embroidery release the pressure by setting the lever on O.

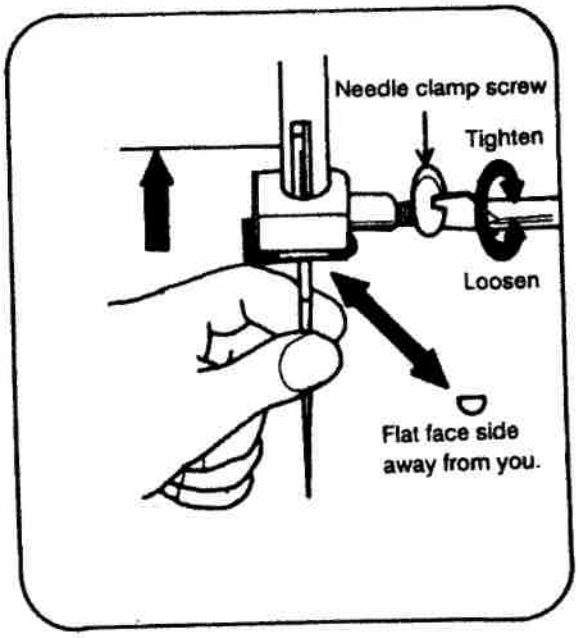
DROP FEED



A. Push feed lever down to drop feed below needle plate for darning, embroidery, and button sewing.

B. Push feed lever up to raise feed above needle plate for normal sewing.

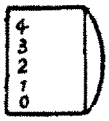
CHANGING NEEDLE



1. Raise needle bar to its highest position.
2. Loosen needle clamp screw and remove old needle.
3. With the flat side of the needle facing away from you, insert needle as far up as it will go.
4. Tighten the needle clamp screw securely.

FABRIC THREAD NEEDLE TABLE

Please note that the following list is a guide when sewing different fabrics.

	Fabric	Thread	Needle	Pressure of Presser foot	Length of stitches		Indication of tension
					ST.	ZZ.	
				Pressure regulation	Stitch length dial 		
Light	Nylon	80 Cotton	9	1	1-3	1-4	
	Tricot	60 S.Fibre					
	Silk	50 silk					
	Wool silk	50 S.Fibre Silk	11				
Medium	Gingham	60-80 Cotton	11-14	2	0.5-3	0.5-4	
	Thin Jersey	60 S.Fibre	11				
	Gaberdine	50 Silk					
Heavy	Denim	50 cotton	14-16	3	0.5-3	0.5-4	
	Jersey	50 S.Fibre	11-14				
	Tweed	50 Silk	11-14				

TO START SEWING

Important Hints

1. Raise the take-up lever to its highest position before starting and after stopping sewing.

2. Hold both threads about 10 cms to the rear of machine for the first two or three stitches.

3. Sufficient fabric should be placed under needle before lowering presser foot.

4. Depress foot and start to sew.

5. Test the machine stitches on a scrap of fabric you plan to use, adjusting the machine for the length of stitch and tension suitable to your fabric.

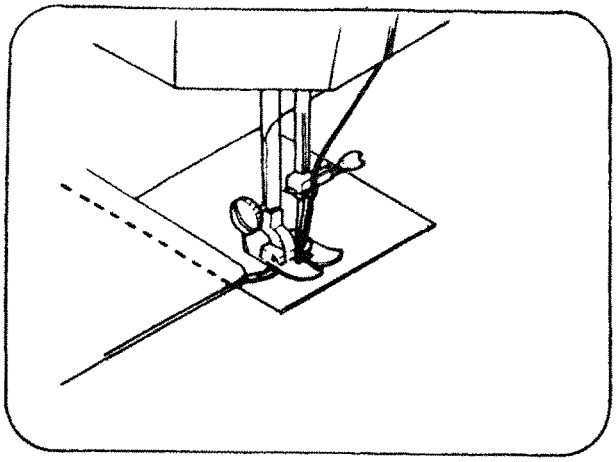
Attention

1. When turning the balance wheel manually, always turn it toward you.

2. Guide the cloth gently with your hand.

3. To prevent breaking needle always raise the needle out of the fabric when you stop sewing.

TO FINISH SEAM

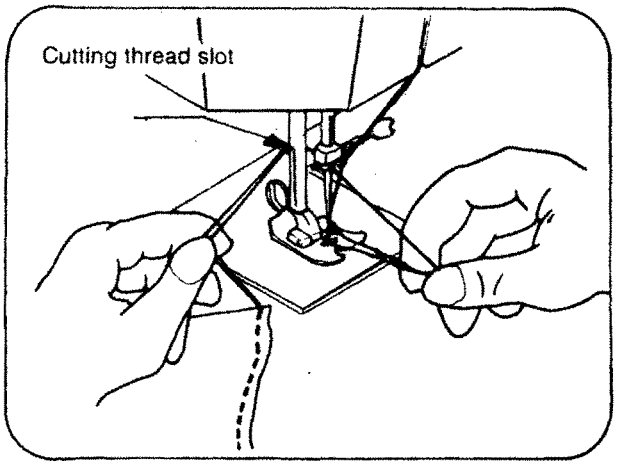


1.Sew to the edge of seam.

2.Push the reverse button and sew in reverse for about 3-4 cms.

3.Raise needle to its highest position.

4.Lift presser foot and pull out the fabric to rear of machine.



5.Cut threads as shown on the thread cutter.

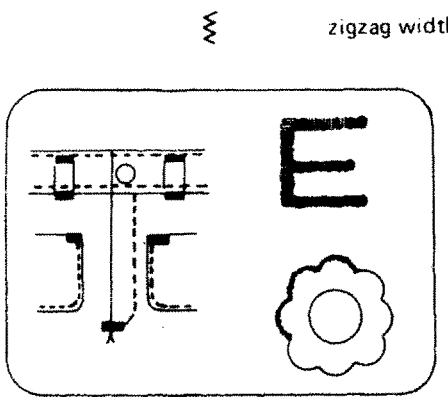
STRAIGHT STITCH

1.This type of stitching is the one used most frequently.

2.The zig-zag presser foot can be used for both straight and zig-zag sewing.

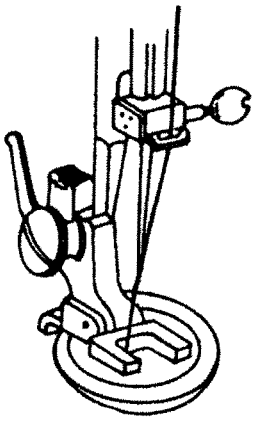
3.For sewing light fabric, use smaller stitch size. (Refer to page 15 for dial setting).

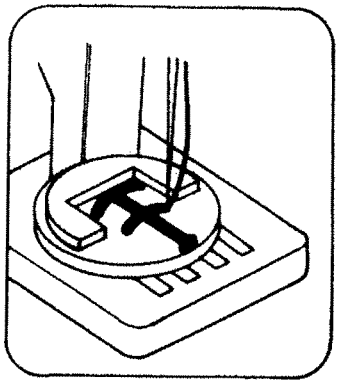
ZIGZAG SEWING



Satin stitching can be used for sewing initials. patterns, applique, etc.

BUTTON SEWING





1.Lower drop feed.

2. Place button attaching presser foot in position.

3.Place button between presser foot and fabric and lower presser foot.

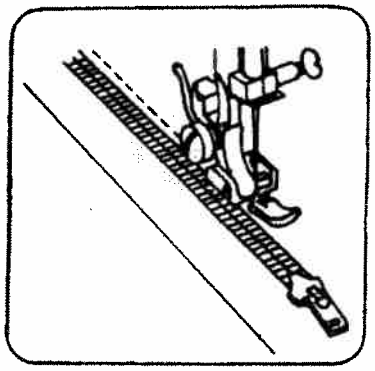
4.Manually turn hand wheel towards you ensuring that the needle enters into both holes of button without obstruction.

(Increase or decrease width setting).

5.Sew about 7 stitches.

6.Pull both threads to the underside and tie together.

ZIPPER SEWING

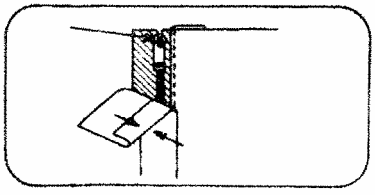


Select straight stitch.

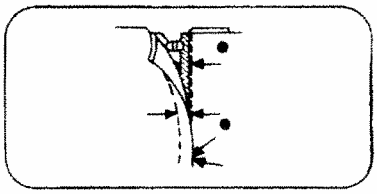
1. Zipper foot is designed to sew close to a raised edge preventing sewing on zipper

2. Place zipper foot in position and attach firmly

3. Fold the fabric about 2 cm and place fabric under foot



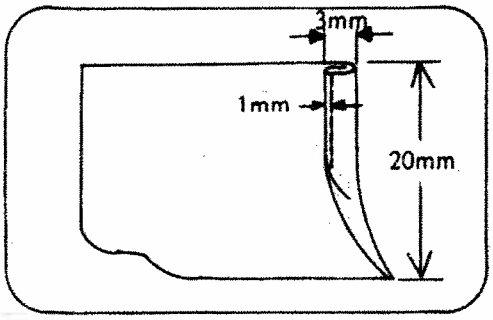
1. To sew the left side of zipper set the zipper foot on the right side of the needle.
2. To sew the right side of zipper set the zipper foot on the left side of the needle.



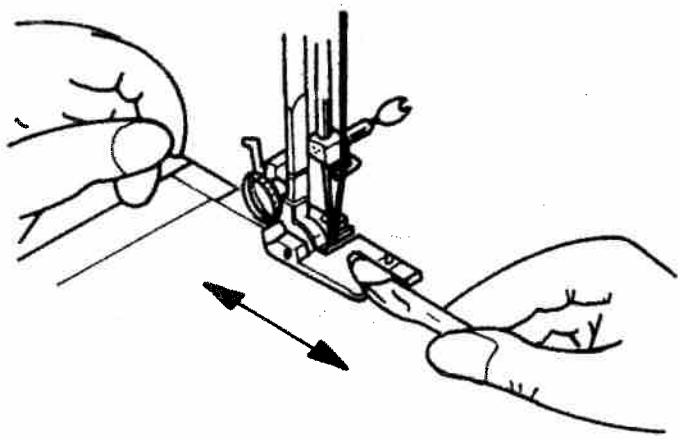
sew as illustrated.

HEMMING

Note: Hemmer foot can be purchased separately.



1. Raise the foot and the needle to its highest position. Replace the foot with the hemmer foot.
2. Fold over the fabric edge by about 3mm and place it under the foot. Secure the folded edge with a few stitches. Take out the workpiece and draw the hem into the hemmer foot by pulling the threads.

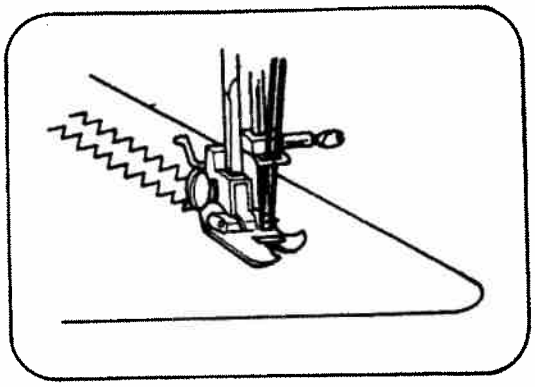


3. Lower the foot and sew the hem.
4. Durning sewing, fold the fabric to the left a little and allow it to run into the hemmer foot.
5. Make sure that the fabric does not move under the right half of the foot. The fabric must be fed into the scroll of the hemmer sufficiently so that the work-piece edge runs freely through the groove under the foot.

Only suitable materials can be used and some practice may be necessary to acheive best results.

TWIN NEEDLE

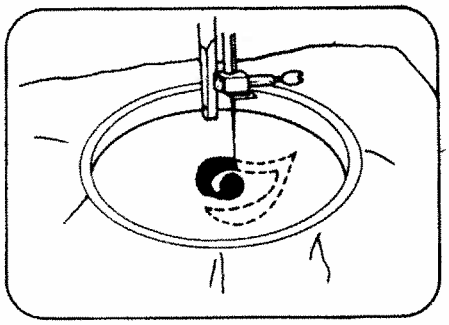
Note: Twin needle can be purchased separately.



Remove regular needle and insert twin needle. Thread both threads through the same path as for normal sewing. Separate threads before last thread guide above the needle. Insert one thread into the right needle of twin needle.
Insert other thread into the left needle of twin needle.

CAUTION:Do not set stitch width wider than number 2 setting. Exceeding this will cause breaking of needle.

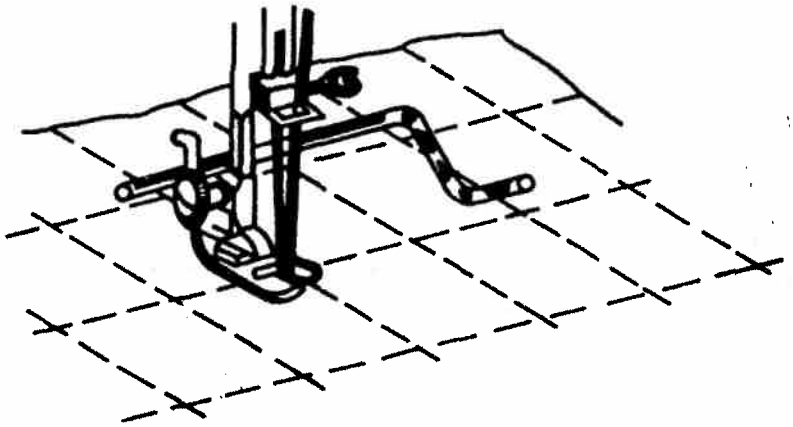
EMBROIDERY



Lower feed dog and move hooped fabric slowly to form the desired effect.
See Page 13 drop feed.

QUILTER

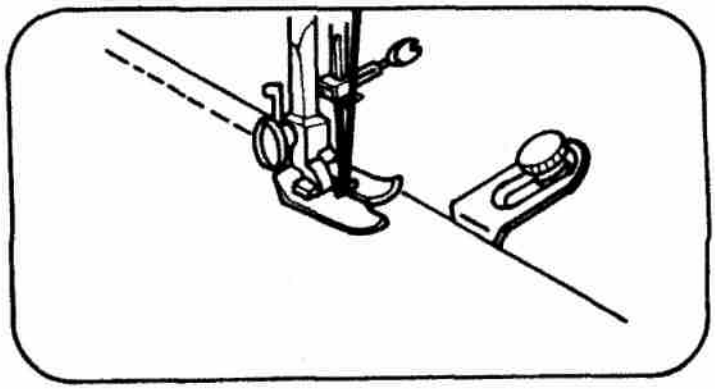
Note: Quilt guide can be purchased separately.



1. Slide arm through hole on top of presser foot holder.
2. Move guide to reguired stitch distance.

SEAM GUIDE

Note: Seam guide can be purchased separately.



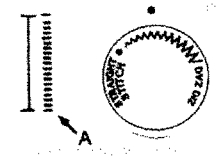
1. Use seam guide when sewing a long seam of regular distance from edge of material.
2. Set guide in hole on bed, at right of needle plate, and adjust distance.
3. Run machine with edge of material touching guide. Position cloth guide at an angle to sew a curved seam.

BUTTONHOLE SEWING

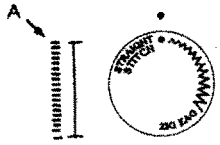
To prepare:

1. Mark the location of buttonhole on your garment.
2. Attach the all purpose foot.
3. Set the stitch length dial halfway between "0" and "1".
4. See illustrations for proper width settings.

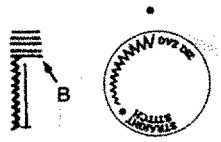
To sew the buttonhole:

1. 

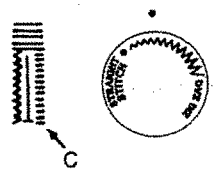
Set the width dial to sew the right side of the buttonhole. Stop with the needle down in the right side of the zigzag stitch. (A)

2. 

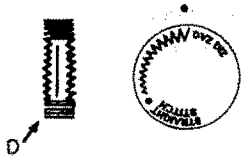
Raise the presser foot and pivot the fabric 180 degrees. Set the width dial to the smallest setting, lower the presser foot and sew one stitch. (This stitch will move the zigzag into position to sew the bartack.)

3. 

With the needle down and the presser foot up, set the width dial to the largest setting. Lower the presser foot and sew the bartack 7 stitches. Stop with the needle down in the right side. (B)

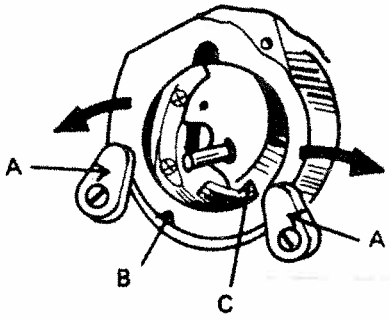
4. 

Raise the presser foot and set the width dial to sew the second side of the buttonhole. Lower the presser foot and sew the second leg of the buttonhole till the length is the same as the first leg. Stop with the needle down in the right side. (C)

5. 

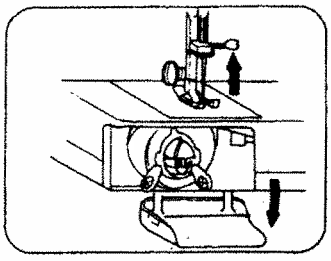
Raise the presser foot and turn the width dial to the widest setting. Lower the presser foot and sew 7 stitches to sew the final bartack. (D)

MAINTENANCE (CLEANING AND OILING)

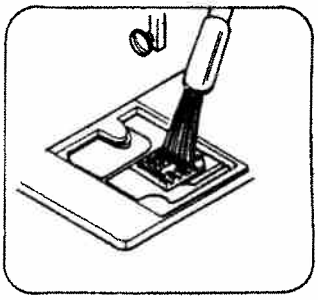


Cleaning shuttle race
(A) Latch knob
(B) Shuttle race cover
(C) Shuttle hook

1. Raise needle to its highest position.
2. Take out bobbin case.
3. Turn latch knob A as illustrated.
4. Take off shuttle race cover.
5. Take out shuttle hook.
6. Clean and oil shuttle race and hook, then replace in the reverse order.



Open face cover and oil points indicated.



Cleaning feed dog

CHECKING PERFORMANCE PROBLEMS WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Fabric not moving	– Feed dog down. – Machine not moving. – Stitch length dial in 0 position. – Light pressure on presser foot.	– Raise feed dog. – Moving stop motion. – Moving dial to 1-4. – Increase pressure on presser foot.
Breaking Needle	– Incorrect setting of needle. – Needle bent. – Pulling fabric. – Incorrect using needle, thread and fabric.	– Reset needle. – Replace new needle. – Do not pull fabric. – Correct using needle, thread, and fabric.
Breaking Upper Thread	– Incorrect position of zigzag width dial. – Improper threading. – Tight upper thread tension. – Needle bent. – Nicks or burrs on shuttle.	– Moving to correct position. – Rethread machine. – Loosen upper thread tension. – Replace new needle. – Replace shuttle, or polish off burrs completely.
Breaking Bobbin Thread	– Tight bobbin thread tension. – Incorrect setting of needle. – Improper threading. – Dust and thread in shuttle.	– Loosen bobbin thread tension. – Reset needle. – Rethread machine. – Clean shuttle.
Machine Jamming Knocking Noise	– No oil. – Dust and thread in shuttle.	– Need oil. – Clean shuttle.
Puckering	– Tension too tight. – Sewing foot pressure too strong. – Incorrect using fabric, needle, and thread.	– Reset. – Regulating sewing foot pressure. – Correct using fabric, needle and thread.